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A CASE OF MYELITIS ENDING IN RECOVERY.[1]

BY G. H. LYMAN, M. D., OF BOSTON.

THE patient, Mrs. E. S. S., aged twenty-five years, was married at nineteen and has had one child, now five years old; no other conception has occurred. Her parents are healthy. She had typhoid fever six years ago; she has been in good health since, though not as strong as before; her complexion is clear and healthy, her nutrition good.

On the 16th of December she had a severe attack of measles; the attendant cough was very urgent. The disease went through its usual stages without any other complication than the unusual severity of the cough, which still remains troublesome. The bowels are constipated. There is slight febrile disturbance, and some pain on pressure over the lumbar vertebræ; there is no muscular twitching; the urine is normal. The patient reports that a week ago (January 1st) she found on awaking in the morning that there was numbness of both feet, with pricking sensations as though the "legs were asleep," though she could stand, and even walk with difficulty. In five or six days the numbness gradually extended to the hips, with manifest increase of loss in muscular power. Hot and cold applications to the spine cause no pain. She is unable to distinguish any difference between a piece of ice and hot water.

January 12th. In attempting to walk across the room the right leg was found to be completely paralyzed, the left nearly so; loss of sensation was nearly complete below the hips, and there was some numbness on the right side of the chest.

January 16th. Slight relaxation of vesical sphincter.

January 19th. Both legs are completely paralyzed, the right more so than the left. If rubbed, forcibly extended, or placed in an uncomfortable position, they become rigid and painful, and spasmodic action is induced, more in the right than the left.

During the past week the spine, below the shoulder-blades, has been sufficiently painful to wake her at night. The past two days the patient has had a decided feeling of stricture about the waist, as though laced too tight. The ominous affection of the vesical sphincter has disappeared. The patient is now unable to stand or walk, and is obliged to be lifted; with much effort she can turn over in bed, and when at rest suffers no pain. Slight headache occasionally, which the patient attributes to medicine. The cough has nearly gone; the appetite is good; the bowels require daily laxative. There is no affection of special senses. The catamenia are regular. Electricity causes imperfect muscular reaction in both extremities, most in the left. The patient was seen to-day by Dr. Ellis in consultation.

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[1] Read before the Suffolk District Medical Society.

When first seen, on January 8th, a laxative pill of quinine, sulphate of iron, colchicum, and aloes was ordered. As the paralysis was not complete, and in the hope that it might be simple congestion of the cord, six leeches were applied to the lumbar region. There being no improvement, but a decided increase of the disease, this was followed in a day or two by ergot and bromide of potassium, a drachm of the former and half a drachm of the latter, three times daily, with good diet and enough morphine and camphor to insure quiet nights.

January 27th. In addition to the above, strychnine, one thirtieth of a grain, with fifteen drops of dilute phosphoric acid, was given twice daily alternating with the ergot, one dose of the latter being omitted. She was also given lager beer and a still more generous diet.

January 30th. There is some return of sensation, and ability to flex the foot upon the ankle.

Two weeks later (middle of February) the patient was able to rise slowly from her chair without assistance. Ergot and bromide were continued three times daily, the strychnine being omitted. Iodine was applied daily to the lumbar region. Slow but steady improvement continued until March 20th, when the patient was able to walk up and down stairs.

April 1st. The patient has recovered entirely both sensation and motion, with no more weakness than would naturally result from her long confinement. The ergot has been gradually reduced during the past fortnight, and cod-liver oil substituted.

April 3d. Ergot is omitted entirely; the oil is to be continued for a short time.

As recovery from myelitis is rare, it may perhaps be suggested that this was a case of reflex or neurolytic paralysis; but the completeness of the paralysis, the slight pain in the spine caused by pressure on the processes, the stricture about the waist, the pricking sensations, the anæsthesia so complete, and the total absence of gastric or urinary derangements, all point to inflammation of the substance of the cord, which fortunately had not progressed so far as to prove intractable to remedies.

WERNECKE ON THE THEORY OF APHASIA.

AN ABSTRACT.

BY JAMES J. PUTNAM, M. D., OF BOSTON.

THE group of symptoms which are seen in certain typical forms of the mysterious disease aphasia has recently received, at the hands of Dr. Wernecke,[1] of Breslau, a careful and scientific analysis, which is the more important because he has been able to find for his theoretical statements a substantial anatomical basis, thanks mainly to the fruitful labors of Professor Meynert, of Vienna.

The interest of the subject will justify this brief sketch of a work which, although clearly and charmingly written, is itself almost too concise.

An accurate conception of the physiology of conscious speech is best obtained by studying the origin and growth of consciousness and volition themselves, in the history of the development of the new-born child; for in its earliest manifestations of life they seem to take no active part. For the amount of muscular coördination required in the infant's first inarticulate crying, for example, even the machinery of the medulla oblongata alone, inherited ready for action, appears sufficient: the raw material of consciousness has yet to be supplied in the form of impressions from without, which it is the first function of the cortex cerebri (the future seat of conscious life), at birth a tabula rasa, to receive, and store up for future use. These centripetal impressions, destined for the cortex cerebri, fall into two distinct classes. The first class consists of the excitations coming through the various sensitive nerves of the body, and serving at once to excite reflex actions, of greater or less complexity, through the agency of the different central ganglionic masses, and to produce in the cortex cerebri the changes of which conscious sensations form the subjective side; the second class consists of the excitations arising in the ganglionic masses alluded to as reflex centres, and through them a picture is carried to the cortex cerebri of the processes in these centres by which the various reflex movements of the muscles are called out, such as play so prominent a part in the early life of the infant. These pictures, the reflection of the nervous processes which underlie the child's first involuntary movements, constitute the subject-matter of conscious motor ideas, soon to reappear, in modified form, as voluntary motor impulses, which are in reality the echoes of past involuntary acts.

There is reason to believe that the former of these two classes of impressions — the sensory — is conveyed to, and stored up in, the posterior (and temporal) regions of the cortex cerebri; the latter — the motor — in the anterior regions of the cortex.[1] Instantly on the occurrence of the inarticulate cry, for example, a certain part of the cortex of the infant's brain (probably of the temporal lobe) receives an impression corresponding with a conscious auditory sensation, and at the same moment the cortex of the frontal lobe receives a second impression (motor idea), which is the correlate of the coördinated muscular movement by which the sound was produced (both being expressions of the activity of certain reflex ganglionic masses at the base of the brain). At the next step in the process, these impressions, and the corresponding conscious ideas, become associated together (by means of fibrous tracts whose existence can be demonstrated), and associated also, in the first place, with other sensitive impressions, corresponding, perhaps, with the causes that gave rise to the cry. In this way a chain of associated impressions is created, the excitation of any link of which may in future cause this same cry to occur, the motor impulse arising now not in the ganglia at the base of the brain, but in the cortex cerebri and bearing the stamp of consciousness and volition. The number of these associated sensitive impressions goes on increasing with immense rapidity, representing the growth of consciousness in the direction of causation.

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[1] Der Aphasischer Symptomencomplex: eine psychologische Studie auf anatomischer Basis. Breslau. 1874.

This primary comparatively simple manifestation of conscious life soon inevitably becomes complicated in a new direction: at the same time with the sensory ideas, the number of associated motor ideas (*i. e.*, of possible voluntary motor impulses) is constantly increasing, so that, to revert to the previous example, on the recurrence of any one, the excitations which provoked the cry, ideas of crying, laughing, and of many other acts may be called up in consciousness, and that motor idea will finally prevail as a voluntary motor impulse, which is associated with the largest number of similar sensitive states of consciousness, or most intimately with any one of them, etc.; in other words, that which corresponds the best with the external influences to which the child has been subjected. With the ever-multiplying number of associated ideas, however, some delay will now inevitably intervene between the arrival of the excitation at any one point in the chain of associated sensory impressions on the cortex cerebri and the occurrence of one out of the many possible motor results; and in this delay, during which a number of sensory and motor ideas are being simultaneously or successively aroused in consciousness, one of which finally prevails over the rest, we see the physiological side of reflection, determination, action. It will thus be seen that every cerebral process, even one so complicated as that involved in conscious speech, is in fact a reflex process, though one of a high order; in other words, that every voluntary impulse must have been preceded at some time by an excitation arising outside the cortex cerebri.

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[1] The grounds for believing that the anterior lobes of the brain are motor, the posterior sensory, in their functions, lie mainly in the fact that the former are found, anatomically and pathologically, to be intimately associated with the motor, the latter with the sensitive, peripheral nerve-tracts; while, moreover, it has been shown (Hitzig, Ferrier, etc.) that by carefully localized excitation of certain parts of the surface of the frontal lobes, crossed muscular movements can be called out. Betz has furthermore found in the cortex of these regions ganglion cells of unusual size, which he considers to be the analogues of the motor cells of the spinal cord.

It is plain that in learning to talk, a child (unless deaf) depends for its sensory impressions upon excitations coming through the auditory nerves; it tries to reproduce the words it hears, running over its small stock of sounds until, by exclusion, it finds those with which the ear rests comparatively satisfied, long before it learns to associate them with the tactile and visual ideas whose presence is necessary to a complete conception of the thing which the words represent. Even when, at a later period, the names of things awaken a far-reaching train of associations in the mind, and speech represents something more than a jangle of sounds, still the strong association between the auditory and the motor ideas persists, the corresponding centres in the cortex cerebri are apt to be innervated in concert. When we think in words, the auditory centre is faintly excited, as well as that for speech; and when we express our thoughts, this innervation of the auditory centre also occurs, and exerts a controlling influence over the motor impulses that result in speech, an inappropriate motor impulse failing to arouse the auditory conception corresponding with the idea that we wished to express. Besides thus controlling speech, our auditory sense enables us to appreciate through the ear, and to correct, mistakes that we may chance to make in our spoken language.

With this amount of preface we may pass directly to consider the characteristic symptoms of aphasia in its different forms. Admitting for the moment the correctness of the reasoning given above, we can manifestly look for aphasic symptoms under either of the following three conditions: —

1. The *auditory centre* may be injured in such a way that the sound of words, though still heard as sound, is no longer in the position to call up the associated ideas necessary to the complete conception of the things the words represent (sensory aphasia). In this case the patient loses his power, to a greater or less extent, of understanding words, — is deaf so far as conversation goes, — but retains his vocabulary intact, and can use it in response to a visual or tactile excitation, although not with perfect correctness, because he has lost both the controlling and the correcting influence of his auditory centre. Cases of this class are rare, but Wernecke reports one of great interest. The patient, when asked, for example, to show the tongue, would look hopelessly around and make some inappropriate answer, but at the least sign from a bystander would put the tongue out correctly.

The typical lesion is in the temporal lobe, adjacent to the fissure of Sylvius. There is usually no hemiplegia.[1]

2. The lesion may affect the *associating tracts*, which pass close under the island of Reil (association aphasia), between the auditory centre and that of speech: the patient retains his comprehension of the meaning of words, and his vocabulary; he loses the controlling influence of the auditory centre and uses words incorrectly, but retains the correcting power of the ear, and by giving time and pains to it can speak pretty correctly. Light cases of this class are seen with persons in health, who get confused in talking, and misuse or forget words. When the lesion is extensive, involving neighboring parts, there may be hemiplegia, or, from the nearness of the island of Reil to the optic commissure, hemiopia.

3. The *motor centres* (in the frontal lobes[2]) themselves may be affected (motor aphasia); in this case the vocabulary is almost lost, only "yes" or "no," or a few short phrases, remaining, which the patient uses under all circumstances, as a child cries, or a dog barks, under the irresistible impulse to use some form of vocal expression of the thoughts. This is the most common form of aphasia; there is almost always hemiplegia. The impairment of the delicate processes of coördination necessary to speech need not involve any appreciable interference with the other functions of the organs of articulation.

The degree to which agraphia (loss of the power of expression in written language) or alexia (loss of comprehension of written language) will occur in connection with these different forms of aphasia depends somewhat upon the previous education and habits of the patient. A child or an uneducated person speaks, aloud or to himself, as he reads and writes, and in his case the loss of the auditory centre would impair his proficiency in those respects. With a cultivated person, on the contrary, there may be an immediate association between the sight of a word and the conception of the thing, and he can read understandingly after the loss of his comprehension of spoken language. In spelling a written word, however, even the cultivated person must fail, for the sight of a single letter suggests no idea but that of its sound.

Apart from this, however, there is nothing in theory to prevent the power of expression of words in writing from being retained even when the power of speech is impaired, inasmuch as the motor centres for writing are of course distinct from those for talking, and might be innervated by an auditory or visual impression on their own account. This sometimes in fact occurs to a greater or less extent, although but rarely, because the associating tracts between the auditory and these two motor centres lie probably in close conjunction and generally suffer together.

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[1] Deaf-mutism is studied to advantage in this connection.

[2] Usually, as is well known, the left.

The author calls attention to the facts that pure cases of these varieties of aphasia, admitting of this exact diagnosis, are rarely met with. The most favorable time to examine them is after the disappearance of acute irritative symptoms, and before the occurrence of secondary morbid changes. Patients of the first and second class are sometimes taken for insane on account of their strange confusion of speech.

For many interesting details, anatomical, physiological, and philosophical, omitted of necessity in this brief sketch, the reader is referred to the original.

Attractive as these explanations are, they must be, and indeed are, admitted to be as yet crude and suggestive only.

The fact that the power of understanding words is lost in case of unilateral lesion of the auditory centre would oblige us to believe that the interpretation of sounds as words, like the origination of speech, occurs in one half of the brain alone, of course with the aid of either ear. At all events, however, the tenability of the following position must be admitted by all: to be conscious we must be conscious of something; if we think, our thoughts must take the form either of words, that is, the remembered images of words, spoken or written, or else of tactile, visual, or auditory images, — in other words, either of sensory or motor ideas. In the developed consciousness a thought is actually compounded of vast numbers of these sensory and motor ideas, associated together often in a net-work of infinite complexity, and any disturbance of this association must involve a disturbance of the thought and the result of the thought; for example, its outward expression in words: for, looked at physiologically, the existence of thought in the form of motor ideas means the faint excitation of those motor centres (centres for speech, etc.) whose stronger excitation induces the outward expression of the thought in word or gesture. Furthermore, there is every reason to believe that the original source of these excitations must lie, or have lain, outside the hemispheres of the brain.

It is the merit of this little book to have clearly applied this psychological reasoning to the study of the development of conscious speech, and to have shown (by facts of necessity omitted in this abstract) how the anatomical structure of the brain, so far as we have become acquainted with it, is, in certain respects, such as theory might have led us to expect.

RECENT PROGRESS IN OTOLOGY.

BY J. ORNE GREEN, M.D.

Membranes and Bands in the Middle Ear (*Synechiæ*). — The conducting mechanism of the ear, which includes the membrana tympani, the ossicula, and the secondary membranes of the labyrinthine windows, has been long recognized as the seat of the great majority of diseases which affect the functions of that organ, and the study of the conditions which interfere with the mobility and vibratile power of this delicate mechanism are of the greatest importance. In addition to the general thickening of the tympanic mucous membrane around the conducting media, and adhesions as the direct result of well-marked purulent inflammation, dissection has often shown the tympanic cavity to contain bands and fibres running across it in various directions. These bands and fibres have been differently explained by writers. Toynbee considered that they originated from a fibrinous exudation on the inner surface of the membrana tympani, which was converted into a firm and vascular membrane, or that, during a swelling of the mucous membrane, adhesion took place between two opposing surfaces, and this adhesion became stretched into a band as the membrane returned to its normal condition. Troeltsch and Gruber apparently agree with Toynbee in his explanation of the formation of these bands; while Politzer has considered them to be the remains of the gelatinous tissue which completely fills the tympanum of the fœtus. Wendt[1] now gives the results of his investigations, which are the most thorough yet published. He finds the situation of these bands and fibres very variable and their existence inconstant; they may connect the walls of the tympanic cavity or the mastoid cells, or may run from one ossicle to another or from the ossicula to the walls of the tympanum or the membrana tympani. Microscopic examination shows that they consist normally of loose connective tissue on a net-work of tense fibres; but in a pathological condition they show sclerosis, cicatricial thickening, calcification, and ossification. He considers that they originate sometimes from the gelatinous tissue of the tympanum in fœtal life, and sometimes from swelling with proliferation of cells and from true granulation tissue. It can readily be understood that the situation and condition of these bands may be of the greatest importance to the ear, for the stronger and more rigid they are, the more they may interfere with the vibratory power of the conducting mechanism; if they bind the membrana tympani to the promontory, the hammer to the stapes, the stapes to the walls of the tympanum, or close the tympanic orifice of the Eustachian tube, they interfere most seriously with the conduction of sound to the auditory nerve; while if they merely unite different parts of the osseous tympanic wall, there may be no interference with the functions of the ear.

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[1] Archiv für Heilkunde, xv.

The pathological importance of these bands can hardly be overestimated, for even if in a healthy ear they exist as a remnant of fœtal life across parts of the conducting mechanism, but in such a lax state that they do not restrain the vibrations of this mechanism, still, being covered with mucous membrane, they are liable to become tense from any slight inflammation and contraction of this mucous membrane, and thus to cause great immobility of the vibratory parts where the slight catarrhal inflammation in an ear free from these bands would have done but little injury.

The diagnosis of these bands during life is possible where one point of insertion is the membrana tympani, and where this membrane is sufficiently transparent. By means of Sieglé's speculum, which allows suction to be exerted on the membrane at the same time that inspection is used, the point of insertion of the intra-tympanic band is seen to remain fixed, while the rest of the membrane moves outwards. Where, however, the bands are not attached to the membrana tympani, the diagnosis of their existence must be uncertain. Wendt denies the diagnostic value of the indrawing of the membrana flaccida as a proof of synechiæ between the hammer and the stapes, which had been insisted upon by Zaufal, as he has often found on dissection the membrana flaccida drawn inwards without any synechiæ existing.

In regard to treatment, Wendt lays particular stress on preventing the formation of these bands during a swelling of the mucous membrane of any kind, either with or without perforation of the membrana tympani. This can be done by keeping the surfaces apart by inflation of air into the tympanic cavity. Where the bands have already formed, it is possible, Wendt thinks, to excise them; but Trautman suggests that catheterization by stretching and pressure would cause atrophy of the bands if they were not very strong, and would be more likely to produce a good result than an operation which offers so much difficulty in its performance as excision.

Diagnosis of Serous Exudation in the Tympanum. — Hagen[1] gives the results of his experiments on the diagnostic value of percussion of the skull; and although in most particulars these were negative, still he claims that in cases of serous exudation in one tympanum we have a valuable aid to our diagnosis in percussion. It must, however, be understood that the results of percussion are in these cases subjective and not objective; that is, the change in the sounds is perceptible only to the patient and not to the observer. On this account the value of this method is limited, as we must depend wholly on the patient's intelligence and on his powers of observation.

In percussion of the skull, either with the finger or with a hammer and plessimeter, Hagen finds that the sound of the blow is heard by the patient in nearly the same way that a vibrating tuning-fork is heard when placed on the skull; *i. e.*, on the middle of the head it is heard equally in the two ears, provided that both ears are healthy; but when carried towards one ear, it is heard loudest in the ear nearest which it is; also, if one meatus is tightly closed, it is heard loudest in the closed ear, no matter on what part of the head the sound is produced. When, however, the tympanum contains serous fluid, he finds that percussion on any part of the skull produces a peculiar rattling in the diseased ear which is distinctly heard by the patient. The removal of the exudation from the tympanum, either by suction through the tympanic catheter or by paracentesis, causes an immediate cessation of the rattling. Hagen has found this subjective rattling so constant that, in cases in which the membrana tympani is not transparent enough to allow the characteristic yellow color of the fluid to be seen through it, he considers the presence of this rattling sound diagnostic of serum, and treats the case accordingly. He has not found this symptom to exist with other varieties of tympanic exudation.

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[1] Monatschrift für Ohrenheilkunde, No. 10, 1874.

Zaufal has been able to confirm this observation of Hagen's in two cases; but he has also observed the same rattling in the same disease with the inspiration of the patient or as the result of sneezing.

Removal of Serum from the Tympanum. — The methods of freeing the tympanum from exudations which interfere with the functions of the ear, and keep up the inflammation of the cavity, have been heretofore the inflation of the cavity by air, thereby scattering the fluid over a larger surface and promoting its rapid absorption, injections of mild alkaline liquids to render the exudations more fluid, and paracentesis of the membrana tympani when the milder methods failed. All of these methods are occasionally objectionable and inefficient, as Gruber[1] points out; for, as the tympanic orifice of the Eustachian tube is often in the upper part of the cavity, the air may enter the tympanum perfectly without affecting the serum collected on its floor in the least; and again, even if the membrana tympani is perforated, a portion of the liquid may lie below the edge of the perforation and serve to keep up the inflammation. Although, in such cases as these, the remaining liquid may be sucked out of the cavity by means of Siegle's speculum, still the use of this instrument increases the congestion of the whole middle ear, and this increase of the congestion sometimes more than counterbalances the good effect of the removal of the serum. To remedy the defects of these different methods of evacuation, Gruber proposes the evacuation of the fluid by means of a small aspirator specially designed for the purpose, with rings by which it can be held steadily. The metallic end of the aspirator is inserted though a perforation of the membrana tympani, either natural or artificial, and by suction the intra-tympanic fluid is drawn out. The instrument is so made that it can be used with one hand; but for a thorough description we must refer to the original article, with its sketch. With this instrument, Gruber has had very satisfactory results, and claims that the end of the aspirator can be passed even as far as the entrance to the mastoid cells.

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[1] Monatschrift für Ohrenheilkunde, No. 12, 1874.

Primary Epithelial Cancer of the Middle Ear. — Cases of malignant growths of any part of the ear are very rare; but a few such have been described. A few cases are reported of epithelioma of the auricle; of the deeper parts, we have three cases of osteosarcoma of the temporal bone, one of sarcoma of the mucous membrane of the middle ear, and six of carcinoma of the ear, some of which perhaps originated from the middle ear. In addition to these, Schwartze[1] gives the minute history of a case of primary epithelial carcinoma originating in the mucous membrane of the tympanic cavity. A man aged fifty-five had suffered from otorrhœa since scarlatina in childhood; pain then began in the ear and side of the face, and from the infiltration over the mastoid and a considerable hæmorrhage through a perforation of the membrana tympani the diagnosis of caries and ulceration of a large vein was made. Through an incision of the mastoid, a large sequestrum was removed, without, however, any relief to the extreme pain in the ear. The opening then closed, but the bleeding continued, and another opening of the mastoid, one month later, showed the petrous bone carious, and the carious parts were removed with a sharp spoon. This produced relief to the pain and bleeding for a time, but both returned after a few weeks, granulations began to show themselves in the meatus, and complete paralysis of the facial nerve followed. Small bits of necrosis continued to come away, the cutis around the auricle became infiltrated and developed a large ulcer, the patient became anæmic, and died from marasmus after three days' sopor. The autopsy showed the pia mater œdematous, slight pachymeningitis over the petrous bone, the transverse sinus partly obliterated and partly filled with pus, and the jugular vein with a large organized thrombus; the temporal bone was largely destroyed, the membrana tympani gone, but the labyrinth wall intact. Microscopic examination of the ulcer, the cervical glands, and the dura mater over the petrous bone showed characteristic epithelial carcinoma.

As in the beginning of the disease the bleeding came from the tympanic cavity, while the membrana tympani was nearly entire, and as primary epithelial cancer of bone never occurs, it seems probable that the disease in this case had its origin in the mucous membrane of the tympanic cavity. The duration of the disease in this instance was about one year. From the fact that in most of the previous cases of malignant disease of the middle ear there was no anterior history of otorrhœa, Schwartze is inclined to doubt the ætiological connection between the otorrhœa and the malignant disease in this case; but he acknowledges the possibility of such a connection. The whole case is interesting as showing the difficulty of distinguishing a malignant disease of the ear from caries necrotica; but Schwartze thinks that microscopic examination of a part of the granulation tissue would render the diagnosis certain.

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[1] Archiv für Ohrenheilkunde, No. 9, page 4.

Fatty Metamorphosis with Partial Destruction of Corti's Organ. — To the pathology of the nervous parts of the ear Moos[1] contributes two cases. The first was that of a woman aged forty-seven, who, from a cold, noticed anæsthesia of the left side of the face and left nasal mucous membrane, with hypersecretion of mucus; paralysis of the whole facial followed, with headache, dizziness, and diminution of the power of hearing and tasting. During the next year, diminution of the visual field, diplopia, contraction of the left pupil, convergent strabismus, unsteadiness of gait, and ataxic movements of the left arm set in, and death resulted from suffocation. The autopsy revealed a vascular spindle-celled sarcoma of the size of a walnut on the porus acusticus internus, through which the auditory nerve passed. A portion of the membranous spinal lamina was completely changed into a mass of detritus, cholesterine, and fatty cells; where the membrane was less changed, its teeth showed rows of fat corpuscles and the interdentate cells had undergone fatty degeneration. Corti's membrane and the membrana basilaris had lost the longitudinal striated appearance, and showed parallel rows of fine fat globules. All the other tissues of the cochlea showed fatty degeneration; the vestibule was normal, but the ossicula, especially the stapes, were but slightly movable; the tympanic mucous membrane was thickened. This abnormal thickening of the mucous membrane Moos attributes to a secondary trophoneurotic disease, the result of the intra-cranial tumor.

The second case was that of a man seventy-five years old, who suffered from childhood from an increasing deafness and subjective noises, and finally became totally deaf. During the last six years of life he had two apoplectic strokes, from the second of which he died. The autopsy showed in addition to the apoplexy, complete immobility of the ossicula and the round window closed by osseous deposit. Microscopic examination of the labyrinth showed almost exactly the same changes as those of the preceding case.

The two cases are interesting as showing the same degeneration of the nervous structures of the ear, caused by two entirely different diseases; the first case being one of degeneration of the nerve from intra-cranial pressure, the second one of degeneration from disuse, sound waves being unable to pass through the rigid ossicula. Moos's supposition that the thickening of the mucous membrane in the first case was a secondary neurotic affection has probably occurred to others who have had an opportunity of observing aural trouble in connection with cranial disease.

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[1] Archives of Ophthalmology and Otology.

The first case is of especial interest as a refutation of the observation of Virchow that the auditory is the only cranial nerve which never develops new growths.

PROCEEDINGS OF THE BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.

F. B. GREENOUGH, M. D., SECRETARY.

FEBRUARY 22, 1875. — *Extensive Scirrhous Disease of the Stomach.* — DR. JACKSON showed the specimen, which he had received from Dr. J. L. Bennett, of Bridgeton, Maine.

The patient was a merchant about sixty-five years of age; the disease had been coming on for about eight months, and for four months he had kept his house and his bed. The disease was not hereditary. From the first he had done no business, he had emaciated from about one hundred and eighty to one hundred and ten pounds, and had lost strength and color in proportion. About the time that he took to his bed, he vomited considerably, a "coffee-ground" fluid. There was, however, not much vomiting at any other time, until the last two weeks, and then it was not urgent. Acidity was a very marked symptom throughout, and there was a sense of discomfort at the epigastrium before the acid rising, but there was scarcely any pain. The appetite was tolerable throughout. The constipation was moderate, but the magnesia that he took for the acidity, with a little rhubarb, and an occasional enema, kept the bowels sufficiently free. A tumor was never felt.

The pyloric portion of the stomach was throughout very much thickened and condensed, and to a considerable extent deeply ulcerated, the disease stopping abruptly at the pylorus. Along the small curvature, the mucous membrane and the submucous cellular tissue were in an early stage of the same disease, which gradually lessened, and stopped considerably short of the cardiac orifice. The stomach was quite large, and the contents, in the recent state, were dark. The other organs Dr. Bennett reported as healthy.

Dr. Jackson remarked upon the frequent occurrence of this form of disease in former years, and its great rarity of late; and the same, he thought, might be said of some other diseases. For a period of years they are common enough, and then they are lost sight of, and a generation of young physicians may come up who never see a case. The striated appearance of the thickened muscular coat and the smoothness of the dense, colorless base of the ulcerated portion of the organ in the present case were very characteristic.

Basilar Meningitis. — DR. CABOT reported the case. The patient, a man, had lost his nose from a rodent ulcer, probably of hereditary syphilitic origin. Local treatment having failed, he was put on large doses of the iodide of potassium, and the ulcer healed. A plastic operation, the flap being taken from the forehead, was successful; but on his return to the Massachusetts General Hospital to have some improvements made by "trimming things up," the patient had a discharge from his right ear. After a short time he died.

Dr. Cabot spoke also of another case where there was redness over the mastoid region, and stupor and other cerebral symptoms set in; the mastoid cells were trephined, pus was evacuated, and the patient recovered.

Dr. J. Orne Green, who had seen the first case in consultation, said that when he saw the patient he had found purulent inflammation of the middle ear, with perforation of the membrana tympani. The mastoid inflammation had ceased. He ordered the ear to be washed out and a mild astringent injection to be applied. That same evening the patient was seized with violent pain in the head, with delirium and coma, and he died in thirty-six hours.

The report of the autopsy is as follows: There was venous congestion of the whole arachnoid, most marked in the occipital region. Both lateral ventricles were filled with serum, that in the left clear, that in the right slightly purulent. There was slight inflammation of the meninges of the whole base of the cerebellum, the medulla, the pons Varolii, and the upper part of the spinal cord, with a purulent deposit over the surface, nearly equally distributed, but more marked on the left than on the right side. No purulent deposit or specially marked inflammation was observed along the auditory nerve. The lateral and petrosal sinuses were normal. The right petrous bone was removed entire. Beneath the dura mater, on the upper and posterior surfaces of the bone, over a space three quarters of an inch in circumference, a minute deposit, perhaps two drops, of very thick creamy pus was found; the dura mater over this deposit was thickened and somewhat inflamed. The bony roof of the tympanum and the antrum mastoideum were inflamed, but not in the least softened, and the deposit of pus lay between this spot and the petrosal sinus and not over the inflamed bone. The roof of the tympanum was unusually thick; after its removal the cavity of the tympanum filled with sero-purulent fluid; the whole mucous membrane of the tympanum proper and of the antrum mastoideum was enormously swollen and congested. The mastoid cells were few in number and were filled with the same thick, serous fluid as the tympanum proper. The ossicula were in position and uninjured. The membrana tympani was a little swollen and red; just below the manubrium was a small perforation, of the size of a pin-hole; around this was a circular depression one eighth of an inch in diameter, probably cicatrix from the healing going on in the perforation. There was slight congestion of the walls of the osseous meatus. No inflammation of the external surface of the mastoid or of its periosteum, was observed. In this case the exact course of the inflammation from the middle ear to the meninges could not be followed, but in many cases it can be traced.

Dr. Jackson said that he had examined many cases of meningitis, following so-called otorrhœa, and had been struck with the healthy condition of the parts between the diseased middle ear and the meninges, the inflammation seeming, as it were, to begin over the petrous portion of the temporal bone.

Dr. Green said that a line of inflammation could generally be traced between the two regions, through either the aqueductus vestibuli or some of the other canals which connect the middle ear with the cavity of the brain, although in this case such was not the fact. Here the disease of the ear might perhaps have been the exciting cause of the meningitis in a person predisposed to the disease. Some of the modern German pathologists refer the cases mentioned by Dr. Jackson, where the disease apparently jumps over the bony division, to a thrombus of the petrosal sinus, caused by an extension of the inflammation along the petrosal-mastoid canal, which conveys a vein from the mastoid cells to the petrosal sinus. He said that the second case reported by Dr. Cabot was of interest, as showing that even after cerebral symptoms have set in, a cure may be effected by giving a free issue to the confined pus.

Monophthalmus. — **Dr. Wadsworth** reported a case that had come under his observation, the patient being a child five or six years old. The left eyeball was represented by a very small amount of semi-transparent tissue at the bottom of the orbit, the lids being normal, with the exception of the lashes being perhaps a little short. The other eye, as far as could be seen, was normal, which is contrary to rule, as usually in cases of monophthalmus the eye shows some affection of the iris or choroid. This malformation is less common than a congenital absence of both eyes, and it is hard to conceive how it is brought about, unless we assume that, as the eyeball is formed before the lids and orbital muscles, the former become atrophied from some cause, during fœtal life.

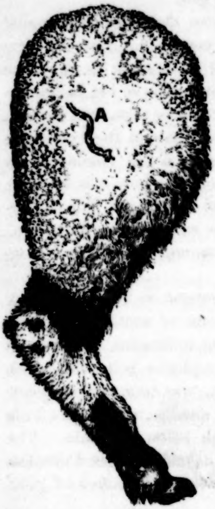
Dr. Jackson observed that he had seen a case of monophthalmus in a monstrosity.

March 8, 1875. — *Lymphangitis of the Broad Ligament.* — **Dr. Shattuck** reported the case. The patient died with the symptoms of septicæmia. The autopsy was made by Dr. Fitz, and showed a purulent infiltration of the right broad ligament in a nodular form, the neighboring lymphatics being filled with pus. One of these nodules, of the size of a walnut, was immediately below the origin of the Fallopian tube; another, somewhat smaller, was distant from the former about an inch and a half, and a half inch below the tube. The uterus was apparently undergoing normal retrogression, and the right Fallopian tube presented no abnormal appearances. There was no evidence of peritonitis.

Peritonitis, followed by Pelvic Cellulitis in a young Girl. — **Dr. Minot** reported the case as being interesting from the youth of the patient. She was a healthy subject, thirteen years old, and normal as to her menstrual function, with the exception that the duration of the period was a little short. Three days after her period, without known cause, she had an attack of peritonitis, with pain, most severe in right iliac region, where there was also dullness on percussion, but no defined tumor. She was ill some time, but began to improve, and had a discharge of several ounces of fœtid pus from her vagina. This gradually diminished in amount, and in three weeks ceased entirely. She used an injection of a weak solution of carbolic acid three times daily. Owing to her youth, and the fact that she steadily improved, no vaginal examination was made.

Dr. Lyman spoke of a case of peritonitis coming on after exposure to cold during a long sleigh-ride; there was marked hardness, and pain on micturition and defecation. He feared that an abscess would result, but the induration gradually disappeared and the patient recovered.

A Remarkable Monstrosity. — **Dr. Beach** showed a specimen which had been sent to him by Dr. F. H. Hooper, of New Bedford. It was that of a lamb born at the same time with a perfectly developed living mate; it was inclosed in a separate sac, and consisted of a single hind leg terminating in a hoof, as shown in the figure. Its length was eleven inches; its breadth at the widest part, four inches; and its thickness (at A) two inches. The upper half of the monstrosity was flattened, rounded at the end, and covered with wool, while the lower half was well formed and covered with hair. The umbilical cord (A) was attached at a point four inches from the superior border, and midway between the two sides. On laying open the specimen, it was found to be very œdematous, and was therefore placed in alcohol and allowed to remain long enough to harden the soft parts for a more complete examination. This œdematous condition has been observed in three acephalic monstrosities examined by Dr. Jackson and described in the catalogue of the museum belonging to this society. On dissection, the shaft and lower extremity of the femur, the tibia, and the bones of the foot were found in every way normal, while the pelvic bones were very imperfectly formed and closely connected with each other by cartilage. Above these last, and lying loose in the soft tissues, were found several small vertebræ, irregularly developed, fused, curved upon each other, articulating with corresponding ribs on both sides, and divided into lateral halves by cartilage, which extended along the median line. The ribs of one side were fused, tolerably well developed, and joined to the sternum by cartilage; those of the opposite side were imperfectly developed, and expanded anteriorly into a thin, irregular plate of bone; these also connected with the sternum. The latter consisted of three small bones united by cartilage. A mass of muscle and connective tissue surrounded the bones; the identification of separate muscles was impossible, from their irregular and imperfect development. The umbilical cord was traced as far inward as the ribs, where it joined some small vessels that finally became lost in the soft tissues. The space within the ribs was filled with intestine thirty-two inches in length, of nearly uniform thickness and calibre, and varying from one eighth to one third of an inch in diameter. There was no division into small and large intestine, but at each extremity it expanded, became somewhat pyriform in shape, and was completely closed; it was partially filled by a dark, greenish-colored and gray pultaceous substance. The result of its analysis by Dr. Wood, who detected in it the presence of biliary pigments and biliary acids, is interesting from the fact that no trace of a liver could be discovered.[1]



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[1] "A fact worthy of remark is the ordinary and perhaps constant existence in the intestine, not of true meconium, but of a mucous matter. Kundmann and Gilibert are the only au-

Two ovoid bodies, one about one third of an inch long, and the other half that length, were attached to the muscles about the ribs. They were surrounded by a serous membrane which was partially covered with blood-vessels, and were continuous with a small cord that was soon lost among the tissues. Their gross appearance suggested that they might be testicles, and this view was confirmed by Dr. Fitz, who found them on microscopical examination to be composed of uniformly shaped tubules containing granular cells of an epithelial character. A small hard body, resembling a molar tooth in form and closely attached to the ribs, proved by the microscope to be bone. The vertebral canal was filled with a firm fibrous material, but nothing resembling the spinal cord in appearance was seen. No viscera beyond those above described were observed.

Dr. Beach quoted St. Hilaire to the effect that we must study "acéphaliens" in the human species, as they are so rare in animals. Of one hundred cases which were known to St. Hilaire, he found only six among animals. They were all ruminants, and of species which, like the human, generally produced one at a birth. The goat furnished one example, the deer one, and the sheep four.[1] He considers that the binary form is constant, although it is not manifested to the same degree in all specimens. Even among the most imperfect varieties, it is always possible at least by dissection to distinguish both halves of the body, or, more exactly, the two homologous but dissimilar parts into which it is divided.[2] He subdivides the "acéphaliens" into the acephalus, the paracephalus, and the mylacephalus.

The specimen just described did not present the binary form externally, and the appearances observed on its dissection barely corresponded with the above statement of St. Hilaire. It belongs to the third and rarest variety (the mylacephalus), of which that writer gives three cases which occurred in the human

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thors whose evidence tends to disprove this generalization. They merely state that they have seen the intestines filled with meconium; it is probable that they have, as this name is often applied to the contents of the intestine, regardless of the scientific meaning of the term. (St. Hilaire, Anômalies des Organisations, iii. 511.)

Mr. Stanley, in a paper on Tumors of the Pelvis, states that "a circumstance of physiological interest will be noticed in two of the foregoing cases, namely, the existence of a fluid in the isolated portion of intestine within the parasitic monster, which in color and other obvious characters closely resembled meconium, although there existed no liver or other distinct hepatic apparatus which could have furnished the coloring-matter of this fluid, and there was certainly no communication between this portion of the intestine and the intestinal canal of the child to which the parasitic monster was attached. An analogous fact occurred to my observation many years ago in the examination of an acephalous lamb, in which, with perfectly-formed stomach, intestine, spleen, and kidneys, the liver was wholly wanting, and yet within the intestine, especially the large, there was found a considerable quantity of a dark and thick fluid, not to be distinguished by its appearance from meconium. When diluted, the color of this fluid was exactly that of healthy bile, but it was not bitter to the taste, and in this respect it differed from the perfect meconium of the human fœtus, which imparts to the tip of the tongue the peculiar bitter flavor of bile." (Medico-Chirurgical Transactions, xxiv. 237.)

The dissection of an acephalous monstrosity described in the catalogue of the Boston Society for Medical Improvement (page 245) showed the intestines containing "a considerable quantity of nearly colorless mucus, with some white, curdy flakes, and in the small intestine some traces of a greenish color."

[1] Op. cit., page 498.

[2] Op. cit., page 499.

species, while he mentions two only as observed among the lower animals; one of these latter was a lamb and the other a kid, the only specimens entitled uniped. The first was described and figured by Emmert.[1] It was born in a separate sac, and seemed at first sight to be merely the left limb of a lamb with some rudiments of the right limb and the tail. On dissection, the pelvis, the inferior portion of the vertebral column, some imperfect viscera, a portion of the intestine, and some rudiments of the head were found.

The second was observed by Hayn and is described by Ollivier.[2] The body was ovoid in form and terminated in a single hind extremity, which contained only a single bone, a bifurcated phalanx. The pelvis was reduced to one of the ilia, and near it was what might be considered a vertebra; in it were found the rudiments of the spinal cord. The intestine, the sexual organs, and other viscera, not named, were rudimentary. This uniped was born as usual with a well-formed twin, from a goat which three years previously had given birth to a three-legged kid.

Otto, in his great work on monstrosities, describes only two acephali: one was human, and consisted of a body and lower extremities, but no upper; the other was a calf, and limited to a body, with no upper or lower extremities.

Dr. Jackson made some remarks on this form of monstrosity, and said that his observation of such cases agreed with the authorities quoted by Dr. Beach.

Embolism of the Coronary Artery, with Symptoms of Angina Pectoris. — **Dr. Fitz** showed the heart from a patient of Dr. J. W. Chase, of Dedham. It was moderately enlarged, and presented a red patch two thirds the size of the palm of the hand, near the base of the left ventricle. The pericardium here was coated with a layer of delicate false membrane; it was injected and ecchymosed. On section through the corresponding walls of the ventricle, the muscle was in part of a yellow, opaque appearance, and dry, with ecchymoses. The fibrils were in a granular and fatty condition. The left coronary artery was extensively atheromatous and an inch from its origin contained an embolus three quarters of an inch in length, grayish-red, completely obstructing the vessel and moderately adherent to its wall. An examination of the cavity of the left ventricle showed extensive fibrous degeneration of the wall, with thinning, and several old parietal thrombi beneath the curtains of the mitral valve, one of which was very loosely attached.

The patient was a male, seventy years of age, who, for the past fifteen years, had suffered from palpitation and dyspnœa, with attacks of a "distressed feeling" in the cardiac region. Four days previous to his death he was suddenly seized with a distressed feeling and an intense pain in the region of the heart, extending down the left arm. He also complained of pain in the back. The pulse was 70, soft and intermitting. Nothing abnormal was heard on auscultation, nor was there any decided feeling of anxiety. Relief was obtained after the subcutaneous injection of a quarter of a grain of morphia. A sleepless night followed this attack, the feeling of pain and discomfort in the cardiac region persisted, and the pulse increased in frequency. The day previous to his death he felt somewhat better, but in the evening was again seized with intense pain referred to the heart; it was so severe that he could not lie down, nor remain quiet. This continued for several hours, when death took place almost instantaneously, while the patient was arranging the pillows of his bed.

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[1] Archiv für Physiologie, vi. 1.

[2] Archives Générales de Médecine, vii. 14.

Chronic Erythema of the Face; Revulsive Treatment by Blisters on the Arm; Recovery. — Dr. **Abbot** reported the case of a middle-aged lady, who had been suffering during the greater part of a year from chronic erythema of the face. The attack commenced with an indolent, very painful pustule on the right side of the septum of the nose. The whole organ was much reddened, swollen, and tender. The pustule was very slow in its progress, and there were several renewals of the inflammation at the original spot. These attacks were accompanied and followed by more or less erythema of the face, in the form of large patches on the cheeks and forehead. During the epidemic of small-pox in Boston in the latter part of the year 1872 and the beginning of 1873, the patient was re-vaccinnated and had a very sore arm in consequence. At the time of vaccination there was much inflammation of the face, which entirely subsided, while the inflammation produced by the vaccination lasted. As this subsided the erythema returned to the face. This affection had been previously treated by various remedies without any very satisfactory result.

When seen by Dr. Abbot, January 6, 1873, both cheeks were marked by large patches of livid redness, which were very tender and gave to the touch the sensation of considerable thickening of the derma. The nose at times was very red and sore, and the affection as a whole was a great disfigurement and a source of no little suffering. Acting on the hint given by the vaccination, it was determined to try the effect of revulsive treatment. A blister two inches square was applied to the outer surface of the left arm. As this was healing, a second was applied on the healthy skin above. In this way a succession of blisters was kept up for a month, securing a continuous irritation of the part. Under this treatment the inflammation of the face and nose gradually subsided, and at the end of that time had entirely disappeared. During the next two months there was an occasional return of the erythema, but it immediately disappeared on resuming the blister-treatment. There has been no return of the affection since, a period of about two years.

Notencephalus. — Dr. **Jackson** showed the cranium of a typical specimen. The frontal and parietal bones were very much depressed, and especially upon the right side. The posterior portion of the occiput was in two broad pieces, and widely separated, so as to leave an opening in the back of the skull that would admit the ends of four fingers; it was fused with the lateral portion upon the left side, but not upon the right. Upon the median line, superiorly, was a small, triangular, and separate bone that connected the parietals and posterior occipitals. Otherwise the skull was not remarkable, excepting a certain distortion (which is not uncommon in such cases), and a fusion of the two lower maxillary bones. The cervical vertebræ were preserved, and showed a wide separation of the laminæ of the first.

At the previous meeting Dr. Jackson had shown the subject entire, which he had received from Dr. C. A. Goldsmith, of Methuen. It was a female child, born last October, perfectly preserved by spirits, and weighing before dissection seven pounds and seven ounces. The mother was a very small and sickly woman. The child presented by the head, kicked vigorously just before expulsion, but did not move afterwards, and was pulseless, though the heart beat for twenty minutes.

From the back of the head there protruded and hung down over the back of the neck a large mass that, during labor, had an encysted feel; it had burst, though covered by healthy integument. Within this mass were found the protruding membranes, mostly resembling the pia mater, and with them a great quantity of a pulverulent substance, deeply stained with blood, and as fine as the finest sand; but there was no cerebral substance outside of the cranial cavity.

The organs of the thorax and abdomen were well formed, excepting the renal capsules, of which no trace could be found.

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TAYLOR ON SYPHILIS.[1]

We welcome this evidence of original work on the part of an American specialist, and upon a subject which our foreign brothers would gladly regard as native American. In the work before us the well-known author has considered the morbid conditions resulting both from congenital and from acquired syphilis in children, a distinction most necessary to be made and one which has been left hitherto nearly undescribed. The structure investigated is that which even in adults has never been thoroughly examined in respect to the modifications to which it may be subjected by the action of the syphilitic virus, and it is chiefly to the morbid anatomist that we owe the knowledge which we possess upon this point. Taylor gives us, however, and for the first time, the clinical history of these lesions according to the method of practical observation and study, and considers them, moreover, not, as in the adult, as the ruined condition of that which had been perfect, but as the necessarily imperfect development of nascent infected germs.

The author holds, in opposition to Diday, Vidal, and others, that lesions of the osseous system in children due undoubtedly to syphilis are by no means rare, and that while it is true that they present strong points of resemblance to the bone lesions of rickets, it by no means follows that scrofula can be considered as their single progenitor. In support of his views he quotes Wegner, Waldeyer, Köbner, and Ranvier. He considers that these lesions may be engrafted upon the bones of the child to a greater or less degree during the whole period of their development, an important point pathologically speaking.

He next gives the personal history of twelve cases occurring under his own observation. The details are given at length, the descriptions are minute, and in two cases there is shown quite clearly a complication of great interest, namely, the separation of the epiphyses from the diaphyses, and these two cases are probably the only ones on record where the survival of the patient enabled not only the course of the lesion but its ultimate results to be studied.

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[1] *Syphilitic Lesions of the Osseous System in Infants and Young Children.* By R. W. Taylor, M. D., Surgeon to the New York Dispensary, Department of Venereal and Skin Diseases, Physician to Charity Hospital, New York. New York: Wm. Wood & Co. 1875.

To the history of cases under direct observation succeeds a *résumé* of some thirty-five cases observed by other writers at various times and in different places. Many of these are imperfect in detail, often lacking very essential particulars in their history, and chiefly valuable from calling attention to bone-swellings.

These enlargements are next considered in their development, course, and distribution upon each and all of the bones of the whole system, and we would call especial attention to the valuable chapter upon the separation of the epiphyses from the diaphyses which may occur in any of the long bones of syphilitic children. This separation is fully dwelt upon under its two varieties: that arising from simple causes, and that due to the syphilitic virus.

A good description follows of the symptoms induced by the osseous swellings, the periostitis of infantile hereditary syphilis, the effects of the osseous lesions upon the ultimate structure and shape of the bones, the period of their occurrence, the intensity of the disease where they are observed, and the condition of the disease in the mothers of those infants in whom such osseous lesions make their appearance.

Upon the question whether similar osseous lesions may be developed in acquired infantile syphilis, Taylor gives affirmative testimony showing that these affections do not proceed solely from congenital causes, but may be due also to the malign influence of a virus by which the constitution has become infected at any period of the growth and development of the bony skeleton.

The field of pathological anatomy has been carefully reviewed; original illustrations are given and the views and observations of other writers cited. The sections on diagnosis and treatment are quite complete, the former necessarily involving the description of some other morbid conditions somewhat akin, at least in their clinical aspects, to the lesions under discussion, and requiring, therefore, a careful differential diagnosis. In regard to rhachitis, especially, much important matter is given appertaining to its relations and diagnosis.

Taylor insists especially upon the necessity of a proper and well-regulated mercurial treatment of the pregnant mother, and its beneficial results in preventing the future development of syphilitic lesions in her child. For the child, as treatment for osseous lesions, he approves of the treatment by mercury and iodide of potassium combined, regarding the pathological condition as rightly comparable with that of the late, adult, acquired syphilis in which gummy-tumor proliferation has not yet appeared. The mother should continue to give the child the breast, to obviate, if possible, any tendency to enteritis. Medication of the child through the mother, Taylor considers totally ineffectual. For the separation of the epiphyses, the indications are the same as in fracture, and immobility of the parts is to be secured by an accurately fitting splint or a bandage, preferably of adhesive plaster.

The volume ends with a brief but full consideration of the swellings which occur later in the life of those hereditarily syphilitic, at the junction of the diaphyses with the epiphyses, and an interesting account of the course of the gummous osseous lesions of older children contrasted with the lesions of infancy.

Attention is called also to the prevalence of error in the etiology rather than the diagnosis of these lesions, certain non-specific lesions of the bones being sometimes regarded as syphilitic, the unjust inference being drawn that "without a syphilitic taint in the child's system the lesion could not have occurred."

Dr. Taylor has succeeded in presenting to the medical profession a treatise at once original, important, and comprehensive, clear in style and accurate in its depiction of morphological changes, valuable scientifically and at least as valuable clinico-practically.

The appearance of the volume is neat and elegant, the type is clear, and the paper, made in this city, heavy and of admirable quality and gloss, the polish indeed being such as to cause a reflection somewhat trying to weak eyes, a "painting of the lily" which is becoming far too prevalent, Emerson's Parnassus, for example, being nearly illegible in certain lights, though very clearly printed. E. W., Jr.

WILDER ON THE REPRODUCTIVE FUNCTION.[1]

Never have we taken up a book for review with so deep a feeling of regret as we now experience — regret that the book has been written, that it is our duty to speak our mind concerning it, and above all, that the author, a rising man of industry, ability, and reputation, should have done himself an injury such as the most malignant enemy could not have inflicted. The second part of the title indicates far more truly than the first the nature of the book. The anatomy and physiology of the organs employed in fecundation are minutely discussed, as well as several social and pathological questions which till now have been brought to the notice of the public only by a species of literature which in the eye of the law is held to defile even the mails. To put such a book into the hands of young boys and of innocent girls is unutterably disgusting. The author clearly feels himself upon the defensive: the defiant motto, "*Honi soit qui mal y pense*," the hitherto unblemished list of the author's publications, the attempt to escape responsibility by quotations, the answers to objections, all show the anxiety he must have suffered. His main argument is that to put the generative function before the young simply as a difficult physiological problem will rob it of the mystery which now makes it so dangerous a question, and will make misdirected passion yield to calm scientific reason. We do not question that the author is sincere, but we cannot excuse his presumption in thus pursuing his opinion in the face of what he must have known is the sentiment of the profession; in the face of what he must have known is usually held as common-sense.

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[1] *What Young People Should Know. The Reproductive Function in Man and the Lower Animals.* By Burt G. Wilder, M. D. Boston: Estes and Lauriat. 1875.

THE AMERICAN MEDICAL ASSOCIATION.

Now that the meeting is well over, and the results made public, our thoughts naturally recur to our position in regard to the association. As is well known, our opinion of it has of late years been far from a high one. We have maintained that, though originally good, it had greatly degenerated, and no longer fairly represented the profession of America. We have nothing to retract as far as the past is concerned, but we are glad to embrace this opportunity to modify our views, and to look forward more hopefully to the future. The late meeting may, on the whole, be called a success. The public proceedings were dignified, and there was an obvious attempt at reform in many respects. The addresses of the chairmen of the sections were good, but the private work in the sections does not appear to have been remarkable. Some members do not seem to have appreciated the seriousness of the occasion, and to have thought these smaller meetings fitting for the display of levity that the dignity of the general ones happily repressed. We could relate some anecdotes that would amuse rather than edify our readers or add to the credit of the performers. This is much to be regretted, for it is in the sections that the solid work should be done. The chairmen and secretaries should be prominent for their attainments in the fields of medicine they represent. The appointments of these officers for next year are not so good as we had expected; at least one important department is very weakly represented, and but few of the names are widely known.

Dr. Bowditch's address as chairman of the committee on hygiene is the first step in a great undertaking. He urges the establishment of a board of health in every State, with the view of ultimately forming a national council of health. The speaker recognized that the work must be done by degrees, and aimed for the present only at inducing the association to use its influence in the matter.

There was one incident, the news of which did not reach us in time for publication last week, that we cannot pass over in silence. We refer to the manifestations of friendly spirit between the representatives of different parts of the country. Dr. Bowditch, in acknowledging the hospitality of the city, alluded to the pleasure it had given him to meet gentlemen from the South, and spoke of the Confederate dead in a way that excited the greatest emotion. Dr. Baldwin, of Alabama, and delegates from many other States, replied in the same spirit, and finally, when Professor Gross, who was greatly moved, spoke in the same strain the enthusiasm was intense. Such a conclusion as this may atone for what shortcomings the meeting presented, but we look for further improvement.

THE SOCIAL SCIENCE ASSOCIATION.

The recent meeting at Detroit brought out as usual many medical papers, and as usual most of the writers came from this neighborhood. Dr. David F. Lincoln read an exhaustive paper on the Relations of School Life to the Nervous System, showing how the former might benefit the latter, but frequently injures it. The paper elicited considerable discussion. The superintendent of schools at Detroit questioned the amount of evil that is alleged to come from the ventilation, or rather the want of ventilation, of school-rooms, as in point of fact they were superior in this respect to the homes of most of the scholars. A paper by Dr. J. J. Putnam was presented, advocating the introduction of gymnastics into schools. Dr. Nathan Allen discussed state medicine and its relation to insanity and public charity. The reports of some charitable institutions were considered at length, and Dr. Hoyt, of New York, proposed that large farms be made to take the place of insane asylums. Mr. George S. Hale, of Boston, read a paper on medical charities, which opens the very interesting and important question of the extent to which it is proper to give gratuitous relief. This is a very difficult problem that it would be well to solve as soon as possible, but which must be very carefully dealt with. The association is doing much conscientious and valuable work, which doubtless will bear fruit in time.

MEDICAL NOTES.

— The act for the laying out of public parks in or near Boston has received the signature of the governor. It provides for the appointment by the mayor of Boston, with the approval of the city council, of three park commissioners for the terms of two, three, and four years from May 1, 1875, and the annual appointment, after 1876, of one commissioner for the term of three years. They are removable by the concurrent vote of two thirds of each branch of the city council, and are to receive such compensation as the city council shall determine. The board will have the power to locate within the city one or more public parks, and for the purpose to take from time to time, by purchase or otherwise, such lands as they shall deem advisable, or to take bonds for the conveyance of lands, and will have the general improvement and control of such parks when established; but it is provided that no land shall be taken or other thing done involving an expenditure of money until an appropriation sufficient to cover the estimated expense thereof has been made by a vote of two thirds of each branch of the city council.

The act provides also for the assessment of a betterment upon all lands receiving benefit by the laying out of a park, beyond the general advantages to all real estate in the city.

The mayor of any city and the selectmen of any town adjoining the city of Boston are given like authority to appoint park commissioners, with similar powers, for the establishing of public parks within their respective city or town.

The act will not take full effect unless accepted by a majority of the legal voters of the city of Boston present and voting at a special election to be held on the second Wednesday of June next.

— Dr. Rose, of New York, calls attention, in the *Medical Record* of May 8th, to Zeissl's method of introducing liquids into the male bladder without the use of the catheter. The plan is to fit the point of an irrigator into the mouth of the urethra, while the patient is placed on his back, with raised nates, the penis being stretched along the abdominal walls. By the employment of this method Dr. Rose was enabled to inject the bladder with a solution of tannin, having introduced a glass tube into the urethra and connected it with a fountain syringe, which was raised to the height of four feet. Previous attempts to wash out the bladder by means of a catheter had been unsatisfactory.

— Suspicions having been entertained that at a recent examination in arts held by the Society of Apothecaries, in London, a certificate had been fraudulently obtained by a person who was not present himself on either of the two days of the examination, but was represented by some one else, who answered the examination papers for him, the secretary to the court of examiners demanded that the certificate thus improperly obtained should be delivered up, so that it might be canceled. The demand was at once complied with, and the secretary writes to the *Lancet* to inform the members of the medical profession in general, and the students in particular, of the facts of the case. The editor of the *Lancet* asks why legal proceedings have not been instituted.

— Professor Charcot maintains, in an article in *L'Union Médicale*, that in most of the crises of hysteria there exists an aura having its point of departure in one of the ovaries, and sometimes in both. This having been determined, it suffices, in order to suspend almost instantaneously the attack, to exercise strong pressure upon the ovary which is the seat of the aura. In a recent conference that was held at the Salpêtrière, M. Charcot showed the efficacy of this procedure in the case of a patient afflicted with hystero-epilepsy. In very many seizures he has suspended at will the attack by compressing the left ovary. The attack is resumed when pressure is removed. In order to exercise compression sufficiently long to entirely avert the attack, M. Charcot employed at the Salpêtrière a kind of tourniquet. Digital compression is made exactly as when one would compress the iliac artery. The fingers are pushed behind the pubes until the pulsation of the artery is felt beneath them.

— The *Philadelphia Medical Times* states that the forthcoming volumes of the Medical and Surgical History of the War of the Rebellion will excel in value their predecessors. The report on cholera, by Dr. McClellan, bids fair to be one of the most remarkable and exhaustive memoirs of the kind ever published. Dr. Billings is building up an immense medical library. It now receives all the medical journals of the world, with the exception of a few obscure periodicals published in Greece, Spain, and Mexico. All original papers are catalogued, not by their titles, but by their actual subjects. The labor involved is enormous, and with the small number of assistants allowed by the funds a long time must elapse before the catalogue is completed.

— The new School of Medicine in Paris in its reconstruction gives opportunity for an enlargement rendered necessary by the constantly increasing number of the students who attend the courses of the school. To-day there are more than four thousand five hundred pupils. The plan as prepared by the architect, M. Ginain, divides the work into two sections. The first section consists of buildings designed for general studies, and for the administration.

The new structures, being joined to the ancient buildings of the school, which were completed in 1786, permit of the preservation of the grand amphitheatre already existing, of the amphitheatres and laboratories of chemistry, of the halls for collections, of a vast library, of offices, and of the apartments for the dean. The second section, designed for the prosecution of practical studies, comprises the buildings of the hospital of clinics in the ancient convent of the Franciscans, and the apartments at present appropriated for pavilions for dissection. The principal divisions are a great amphitheatre for the courses of the faculty, various halls for free instruction, large physiological laboratories, a court for animals, aquariums, and apartments for practical anatomy (halls for dissection, laboratories of histology, of pathological chemistry, etc.); in addition, a museum of pathological anatomy within the ancient refectory of the Franciscans, and, finally, special laboratories for the professors, and various apartments. The entire expense of these works will be scarcely less than nine millions of francs.

— In regard to the medical department of the University of California, to which attention has been called of late in discussions on medical education, we learn that the school was formerly a private affair, one of the two medical schools in San Francisco; its head man was without high standing in the profession, but possessed of a big fortune and a great reputation in the country. His aim was to perpetuate his name, and he therefore offered his school to the university with the buildings, etc., on condition that it should be called its medical department, naming the building "Toland Hall." The regents soon found that they had received an elephant. The old faculty insisted on becoming the new one, and in it were two professors, one of whom could not write two words correctly; the other, an American, always declared he had a French diploma until some began to doubt it, and he then showed a German diploma which ultimately proved to be counterfeit. The *San Francisco News Letter* got scent of the scandal and brought it out in its true light, writing to the German university and finding out that no one of that name (Dean) had ever graduated there, and then publishing the letters in its issue. We regret to learn also that there are men in the State and city medical societies who have no diplomas and yet are tolerated and admired.

LETTER FROM PARIS.

Messrs. Editors, — I have been rather tardy in replying to your kind invitation to write you something of professional affairs on this side of the ocean. A very rough and long passage, and the severe sickness of my confrère, my fellow-missionary, as our facetious C. E. S. entitled him, is my excuse. Yet my friend's sickness, which has delayed him in Liverpool up to the present time, was the occasion of many good results. In the first place, it gives occasion to speak of the kindness shown to us in most trying circumstances by Captain McKay, of the Cunard steamship Hecla, and by Dr. Hill, of the same ship; and occasion to remember Mr. Harrison, surgeon to the Liverpool Infirmary, for his entire devotion.

American medical men neglect Liverpool, and hasten to London by the first train. Yet the museum of the Liverpool Infirmary contains things not to be seen elsewhere, and the morality of a morbid anatomist must needs be of stern stuff, if he were trusted there alone. First, there is a skull showing bony hypertrophy to such a degree, and of so curious form, that it looks as though it was the work of coral insects, which had attempted sculpture on a grand scale. Skull, face, and lower jaw are magnified to perhaps three or four times the natural size, and almost exactly resemble coral. A portrait of the man whilst living is near by. I have never seen the equal of this specimen in any cabinet in the world. But perhaps the wonder of the museum is a specimen shown me with evident pride by Dr. Waters, the author of a well-known work on Diseases of the Lungs. It is that of a clot effused into the substance of the restiform body, lacerating it in all directions, and yet during the man's life, some twelve hours after entrance to the hospital, there was entire preservation of sensibility! The case was carefully watched by Dr. Waters, who suspected that some lesion of great interest would be found. By the kindness of Dr. Mitchell Banks, I saw something worthy of imitation by us. Besides the physiological laboratory, with its abundance of microscopes, there was a series of sections of the brain, showing each anatomical point worthy of remembrance, inclosed in cells, I may call them; they are colored blue, I believe, to contrast sharply with the white preparations; they are sunk into the wood of the cases and covered with glass. Thus they are ever ready for the student to consult.

Before I leave Liverpool, let me say that my sick friend had the very efficient services of a trained nurse from the Liverpool Nurses' Training Institution, a most excellent institution, well worthy of a visit by those among us who are interested in this subject.

From Liverpool I went to Manchester to see the Manchester Infirmary, attracted thither by the fame of Mr. Edward Lund, whose admirable book entitled "Five Years' Work in the Manchester Infirmary" I had read with great delight at home; the pleasure was increased by the perusal of his papers in the volume published by the Liverpool and Manchester Association, a work published yearly, and one that all your Boston clubs and libraries ought to apply for to Mr. Reginald Harrison, F. R. C. S. E., Liverpool. Manchester, I believe, is always smoky. The sun hangs in the sky like a copper ball, rather than a resplendent luminary. At the infirmary, a fine, large building, standing in an open square, I was most hospitably welcomed by Mr. Lund, who was waiting to receive me. Mr. Lund is an elderly gentleman of most kindly and benevolent face, quick and nimble, one who can work whilst talking; a most thorough surgeon, no man can doubt after seeing him for ten minutes in a ward. Cheering, pleasant words for patients, plain practical teaching for his dressers, mixed with his bright, ready fun. Blessed are they whose lot it is to be cured or taught in the Manchester Infirmary. An ardent and early disciple of Lister, Mr. Lund carries out the antiseptic doctrine to its full extent; and whether one believes Pasteur's theory or not, one cannot visit with Mr. Lund and not be impressed by the excellent results he obtains, or after seeing him dress, which he does with his own hands and with great rapidity.

Mr. Lund showed me a resection, or rather excision, of the elbow-joint where there was absolutely no offensive odor perceptible; also a Syme's amputation; and a case of ununited fracture of the thigh in which he had shortened the fragments, and had united them by long screws. Here there was no offensive odor or pus. Mr. Lund, who is a most ingenious man, told me that in his operations for ununited fracture he had found a watch-maker's broach to be much better for drilling the holes than the Archimedean drill used by us. After the hospital visit I went with Mr. Lund to his office, where he showed me his famous specimen of a table-knife which had been swallowed by a lady, and afterwards, many months I think, passed through the abdominal wall near the umbilicus. Mr. Lund is famous among other things for his removal of the tarsal bones, astragalus and os calcis; and his success in these operations has been marked. On one occasion he removed both astragali for great deformity in club-foot. He attributes his celerity and success in these cases to the use of his astragalus hook, as he calls it, a strong hook with a cutting edge. This he passes under the ligaments, and after cutting with the edge uses the hook as a lever. I shall return to this subject, apropos of some attempt recently made here for removal of the os calcis. Before I left Mr. Lund, he also showed me two cutting hooks, which he had used in a case of backward dislocation of the knee from disease, for dividing subcutaneously the crucial ligaments. The case was successful. I shall not soon forget Manchester or Edward Lund.

Leaving Liverpool, I came to London, and although on the 20th of March the fields were quite green, and young lambs were plentifully sprinkled over the pastures, the weather in London was so cold that I was glad to hasten on to Paris. Here there had been ice but the day before in the basins of the fountains, for the spring is exceedingly backward. At the present date the chestnut-trees are but just bursting into leaf. Warm days and cold nights are the "ordre du jour" here, and colds and coughs abound. Coming to professional matters, we have been for the last week or two in an unsettled and very unsatisfactory state. Easter had come, and for the week succeeding it nothing was doing at the hospital or at the school. The festival of "les paques" and "nous sommes en vacances" was the continual cry; but we are now going on once more. The pupils are passing their examinations; offers to print theses are hung out of every library door, for a consideration, no doubt. Professors look fagged out, and mention to you, with an air of disgust, that if anything in the world is more tiresome than another, it is being condemned to read theses.

Figaro, always bright and amusing, told the other morning a good story of examinations. A student had failed in everything. Botany alone remained. The kindly professor took a specimen of the plant tobacco, and asked what it was. The student looked at it with lack-lustre eye, and knew it not. "Something you take many times a day," said the professor gently. "I have it," shouted the student, "it 's absinthe." Perhaps I had better stop here, and next week take up the work again, refreshed by this excellent stimulant.

W. C. B. FIFIELD.

PARIS, *April* 10, 1875.

WEEKLY BULLETIN OF PREVALENT DISEASES.

The following is a bulletin of the diseases prevalent in Massachusetts during the week ending May 15, 1875, compiled under the authority of the State Board of Health from the returns of physicians representing all sections of the State: —

Bronchitis, rheumatism, and pneumonia are prevalent in all parts of the State.

In the Connecticut Valley there is an increase of measles and of whooping-cough. Huntington has a case of small-pox.

In the Midland section there is more diphtheria than at any time since January 1st. Diarrhœa and croup have also increased. Cases of "German measles" are reported.

In the Northeastern counties, whooping-cough and typhoid fever have increased. Measles is again declining; in some parts, as in Gloucester, it leaves behind it an epidemic of "German measles."

The reports from the Metropolitan section contain little that is noteworthy. Rheumatism is the prevailing disease. Influenza and measles, with "German measles," maintain their hold, but are diminishing.

In the Southeastern counties there is a satisfactory absence of acute diseases, except those which are mentioned as prevailing in the State at large.

During the week bronchitis, influenza, and measles have diminished; all the other diseases have increased somewhat or remain stationary.

The type of the prevailing affections is almost uniformly mild.

F. W. Draper, M. D., Registrar.

COMPARATIVE MORTALITY-RATES FOR THE WEEK ENDING MAY 8, 1875.

	Estimated Population.	Total Mortality for the Week.	Annual Death-rate per 1000 during Week.
New York	1,040,000	578	29
Philadelphia	775,000	365	24
Brooklyn	450,000	201	23
Boston	350,000	148	22
Providence	100,000	32	17
Worcester	50,000	20	21
Lowell	50,000	26	27
Cambridge	44,000	20	24
Fall River	34,200	16	24
Lawrence	33,000	21	34
Springfield	33,000	9	14
Lynn	28,000	12	22
Salem	26,000	12	24

Annual Election of District Medical Society Officers. — Officers for the ensuing year have been chosen in the District Societies as follows: —

Berkshire. — President, Dr. J. L. Miller; Vice-President, Dr. C. D. Mills; Secretary, Dr. J. F. A. Adams; Treasurer, Dr. W. M. Mercer; Librarian, Dr. M. E. Jones; Trial Commissioner, Dr. Abner M. Smith; Councillors, Drs. J. F. A. Adams, Clarkson T. Collins, Andrew M. Smith, Abner M. Smith, S. M. Reynolds, H. L. Sabin; Censors, Drs. C. T. Collins, Abner M. Smith, F. K. Paddock, M. E. Jones, D. M. Wilcox.

Franklin. — President, Dr. R. C. Ward; Vice-President, Dr. F. J. Canedy; Secretary, Treasurer, and Librarian, Dr. A. C. Walker; Trial Commissioner, Dr. A. C. Deane; Councillors, Drs. A. C. Deane, E. C. Coy, A. C. Walker, J. W. D. Osgood, E. Barton; Censors, Drs. F. J. Canedy, W. H. Hills, C. E. Severance, E. S. Weston, C. L. Fisk, Jr.

Bristol North. — President, Dr. C. Howe; Vice-President, Dr. E. J. Bassett; Secretary and Treasurer, Dr. A. S. Deane; Librarian, Dr. H. H. Sproat; Trial Commissioner, Dr. H. C. Bullard; Councillors, Drs. J. R. Bronson, S. D. Presbrey, N. Paige, J. Murphy; Censors, Drs. W. W. Godding, G. L. Ellis, N. M. Ransom, J. Murphy, S. D. Presbrey.

Worcester North. — President, Dr. Ira Russell; Vice-President, Dr. G. Jewett; Secretary and Librarian, Dr. G. D. Colony; Treasurer, Dr. A. Miller; Trial Commissioner, Dr. C. C. Field; Councillors, Drs. Ira Russell, G. D. Colony, George Jewett, B. H. Hartwell; Censors, Drs. E. J. Sawyer, A. Miller, C. C. Field, J. M. Blood, F. W. Russell.

Hampden. — President, Dr. W. J. Sawin; Vice-President, Dr. H. G. Stickney; Secretary, Treasurer, and Librarian, Dr. G. S. Stebbins; Trial Commissioner, Dr. P. LeB. Stickney; Councillors, Drs. T. L. Chapman, W. W. Gardner, E. M. Pease, C. Bell, S. D. Brooks; Censors, Drs. D. Clark, C. P. Kemp, L. S. Brooks, H. C. Belden, L. H. Humeston.

Books and Pamphlets Received. — The Elements of Embryology. By M. Foster, M. D., F. R. S., and F. M. Balfour, B. A. London: Macmillan & Co. 1874.

Eating for Strength. By M. L. Holbrook, M. D. New York: Wood and Holbrook. 1875.

Health. A Handbook for Households and Schools. By Edward Smith, M. D., F. R. S. New York: D. Appleton & Co. 1875.

What Young People should Know. The Reproductive Function in Man and the Lower Animals. By Burt G. Wilder. Boston: Estes and Lauriat. 1875.

Ichthyosis of the Tongue and Vulva. By R. F. Weir, M. D. (Reprinted from the New York Medical Journal, March, 1875.)

Caution. — William Wood & Co. publish a notice warning all persons who may happen to obtain odd volumes of Ziemssen's Cyclopædia that the publishers do not engage to complete such sets, but expect subscriptions for the whole.

The Boston Society of the Medical Sciences. — The next regular meeting will be held on Tuesday evening next, May 25th, at Dr. Robert Amory's.